## **REMARKS**

Applicants gratefully acknowledge receipt of an initialed Form PTO 1449, which indicates consideration of the documents cited therein.

Applicants have amended Claims 19 and 20 (and thus all dependent claims) to limit group A to five-membered rings having at least one ring nitrogen atom. Applicants have also amended Claims 19 and 20 to delete provisos in the definitions of groups (A1) and (A11) that are redundant since R<sup>3</sup> cannot be hydrogen (per a previous Amendment). All claims remain fully supported in the specification.

## Restriction Requirement under 35 U.S.C. 121

In the absence of a clear indication to the contrary in the Advisory Action, Applicants believe that Claim 29 remains withdrawn. For this reason, Applicants again request rejoinder and reserve the right to file one or more divisional applications directed to non-elected subject matter. However, because the Advisory Action states that Claims 19, 20, 23, 24, 28, and 29 stand rejected, Applicants include Claim 29 within their discussions below.

## Rejection under 35 U.S.C. 103

Claims 19, 20, 23, 24, 28, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,965,774 ("Yoshikawa et al"). Applicants respectfully traverse.

As fully discussed in their previous Amendments, Yoshikawa et al discloses a very narrowly defined set of plant disease controlling carboxanilide derivatives having the formula

(again redrawn by Applicants to show more clearly the nature of the terminal groups of the alkyl side chain) in which **A** is hydrogen or methyl, **B** is methyl or ethyl (except that A is not methyl when B is ethyl), and **Het** has one of the formulas

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$$R^1$$
 $N$ 
 $N$ 
 $CH_3$ 
 $Or$ 
 $CH_3$ 
 $S$ 
 $R^2$ 
 $CH_3$ 
 $S$ 

(where **R**<sup>1</sup> is trifluoromethyl or difluoromethyl and **R**<sup>2</sup> is trifluoromethyl, difluoromethyl, or methyl), as well as compositions thereof and various intermediates used to prepare such compounds. E.g., column 4, lines 22-66, and following text. Yoshikawa et al clearly does <u>not</u> teach or suggest compounds in which the alkyl side chain can terminate with <u>three</u> groups attached to one carbon atom.

In contrast, Applicants claim compounds having the formula

$$\begin{array}{c|c}
O & & & \\
\hline
 & & & \\
R^1 & & & \\
CH_3 & & CH_3
\end{array}$$

where R³ must be halogen, alkyl, or haloalkyl (but is never hydrogen), A is limited to a narrow set of nitrogen-containing five-membered rings, and the various other groups are defined as above. Applicants' claimed compounds are thus limited to embodiments in which the alkyl side chain on the phenyl ring must terminate in a fully substituted carbon atom bearing three groups, an example of which is -C(CH₃)₃ (also known as t-butyl), which is present in the inventive test compound discussed below. The Final Office Action and by extension the Advisory Action rely on *In re Wood, Whittaker, Stirling, and Ohta*, 199 USPQ 137, 582 F2d 638 (C.C.P.A. 1978), to conclude that hydrogen and methyl substituents are known to be interchangeable and that replacing a methyl with a hydrogen at the alkyl C-1 position and replacing a hydrogen with a methyl at the alkyl C-3 position would lead those skilled in the art from Yoshikawa et al to Applicants' claimed invention. However, the cited decision states only that the claims then at issue "would have been expected to have similar properties to the structurally similar . . . compound." See 199 U.S.P.Q. at 140 (emphasis added). That is, it is reasonable to conclude that one would not expect different properties. In fact, the Advisory Action

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acknowledges that structurally similar inventions can be patentably distinct under certain circumstances, particularly where "a clear showing of unexpected results of the instant compounds over the prior art compounds could render the structurally similar compounds of the instant application patentably distinct over the prior art."

Applicants maintain that the comparison data presented in the Declarations of Dr. Ulrike Wachendorff-Neumann and Dr. Peter Dahmen overcome any inference of obviousness for the compounds at issue. As previously pointed out, these data, which were obtained <u>against four different organisms at three different application rates</u>, show the clear superiority of Applicants' inventive compound having the formula

(which corresponds to a compound of their formula (I) in which R<sup>3</sup> is CH<sub>3</sub> such that the alkyl side chain terminates with a t-butyl group) when compared with the corresponding compound of Example 4 of Yoshikawa et al having the formula

(in which the alkyl side chain has a isopropyl terminal group). Applicants maintain that those skilled in the art would not have expected such differences. As discussed above, Applicants maintain that the prior art would suggest no more than essentially similar efficacy, *not* enhanced activity as found by Applicants.

Applicants are. of course, aware that the pyrazole ring of the compounds used in the comparison experiments has a CF<sub>3</sub> substituent rather than the CHF<sub>2</sub> substituent of the elected species. Applicants, however, submit that the inventive trifluoromethyl

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compound of these experiments falls within the scope of their desired claims and would, in any case, support the proposition being argued, namely, that the nature of the <u>alkyl side chain</u> is a critical feature that is being demonstrated by their experiments. Even if indirect in this sense, Applicants maintain that their experiments support the allowability of their claimed invention. The Final Office Action and Advisory Action address this point by asserting that Applicants' data are not sufficient because the comparison compounds, though inferior, are still effective against the fungi tested. Applicants again submit that this assertion ignores the fact that their tested compound is unexpectedly more effective against a series of fungi.

Furthermore, Applicants have obtained additional comparison data in the form of a new Declaration under 37 C.F.R. 1.132 of Dr. Ulrike Wachendorff-Neumann showing that varying the nature of the pyrazole substituent does not overshadow the significance of the alkyl side chain. The newly presented data were obtained for compounds having a second methyl substituent on the pyrazole ring instead of a CF<sub>3</sub> substituent (as in the previous Declarations) or CHF<sub>2</sub> substituent (as in the elected species). In particular, an inventive compound having the formula

$$CH_3$$
  $O$   $N$   $H$   $CH_3$   $CH_3$ 

in which the alkyl side chain has a terminal t-butyl group (see Applicants' Example 2) is unexpectedly superior against three different organisms when compared with a compound having the formula

in which the alkyl side chain has a terminal isopropyl group (see Applicants' Example 1, which is not within the scope of the present claims). Applicants point out that the

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pyrazole ring of each compound bears a fluorine atom that, while not within the scope of Yoshikawa et al, is specifically disclosed within their specification and falls within the scope of their base claim. Therefore, although the experiments do not directly compare the inventive compounds with this reference, the comparison experiments described in the new Declaration are designed to show the significance of the alkyl side chain.

Applicants note by way of further comment that their specification beginning at page 58 includes use examples that provide data for both test compounds against a variety of organisms at relatively high application rates (i.e., 100 g/ha as shown in the first two entries of Tables A and B, 500 g/ha as shown in the first two entries of Tables C and D, and 750 g/ha as shown in the first two entries of Table E). Although the difference in efficacies is evident in the Botrytis test (see Table C), the efficacies found for the other tests at these application rates were generally high, thereby making comparison results at these rates difficult to analyze. Therefore, the experiments described in the new Declaration were obtained not only at similarly high application rates (i.e., 100 ppm in the Sphaerotheca test and the Venturia test and 500 ppm in the Botrytis test) but also at much lower application rates (i.e., 10 ppm in the Sphaerotheca test and the Venturia test and 100 ppm in the Botrytis test). At the lower application rates, the inventive compound was much more active in each test than the comparison compound. In fact, the inventive compound surprisingly exhibited virtually undiminished efficacies at the lower application rates compared to the higher application rates, in contrast to the comparison compound, which was much less active at the lower application rates.

The data in all of the Declarations discussed above clearly show that compounds of their invention in which the alkyl side chain terminates in a  $-\overset{C}{C}-R^3$  group are superior  $\overset{C}{C}H_3$ 

to comparative compounds in which the alkyl side chain terminates in a  $-\mathrm{CH}_3$   $\mathrm{CH}_3$ 

group, regardless of the nature of the substituents on the pyrazole ring. Applicants therefore submit that they have shown that their claimed invention is patentably distinct over by Yoshikawa et al.

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## **Double Patenting Rejections**

The claims stand rejected under the judicially created doctrine of obviousness-type double patenting over various claims of one issued patent (formerly copending) and seven still copending applications. That is, Claims 19-21, 23, 24, 26, and 28 stand rejected over specified claims of U.S. Patent 7,358,214 and U.S. Application Serial Nos. 10/484,108 (published as US 2004/0204470), 10/576,050 (published as US 2007/0072930), 10/576,153 (published as US 2007/0196406), 10/583,312 (published as US 2007/0276022), 10/557,083 (published as US 2007/0066673), 10/597,723 (published as US 2007/0203148), and 10/576,243 (published as US 2007/0037858). Although Applicants believe that their claimed invention is patentably distinct from the cited patent and each of the copending applications, Applicants again offer to submit an appropriate terminal disclaimer as suggested in the Final Office Action (and by implication the Advisory Action) if their claims are otherwise found allowable.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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Q:patents/prosecution documents/cs8772/8772 amendment 4-13-10